Scandinavian Journal of Primary Health Care

ISSN: 0281-3432 (Print) 1502-7724 (Online) Journal homepage: https://www.tandfonline.com/loi/ipri20

# Management of depression in elderly general practice patients

Harm van Marwijk, Geertruida H. de Bock, Jantina Ma. de Jong, Adrian A. Kaptein & Jan D. Mulder

**To cite this article:** Harm van Marwijk, Geertruida H. de Bock, Jantina Ma. de Jong, Adrian A. Kaptein & Jan D. Mulder (1994) Management of depression in elderly general practice patients, Scandinavian Journal of Primary Health Care, 12:3, 162-168, DOI: 10.3109/02813439409003693

**To link to this article:** https://doi.org/10.3109/02813439409003693

Published online: 12 Jul 2009.

# Management of depression in elderly general practice patients

Harm van Marwijk[1], Geertruida H. de Bock,[1] Jantina MA. de Jong[2], Adrian A.[1] Kaptein[1], Jan D. Mulder

Departments of General Practice[1] and Psychiatry,[2] Leiden University, Leiden, The Netherlands

**van Marwijk HWJ, de Bock GH, de Jong JMA, Kaptein AA, Mulder JD. Management of depression in elderly general practice patients. Scand J Prim Health Care 1994;12:162–8.**

***Objective*** **– To describe general practitioners' (GP) management (i.e., recognition and treatment) of depression in elderly patients.**
***Design*** **– Two separate studies were performed: (a) to study recognition of depression, a postal survey was sent to GPs; (b) to evaluate the consistency of treatment, patients considered depressed by GPs were described.**
***Setting*** **– general practices in the West of The Netherlands.**
***Subjects*** **– 65 GPs, and 44 patients of 7 GPs.**
***Main outcome measures*** **– (a) degree of recognition of depression as described in major depression case-vignettes (b) consistency of treatment.**
***Results*** **– (a) On average 65% of the GPs recognized every depressive symptom in case-vignette one, while 52% of GPs recognized each symptom in case two. Most (39) doctors used a time criterion of less than 5 weeks for depressive disorder.**
**(b) Depressed patients with at least three depressive symptoms all received treatment. Chronically depressed patients appeared to be treated somewhat inadequately.**
***Conclusion*** **– The results suggest some inadequate knowledge of criteria for major depression and some inconsistency in treatment. The management of depression in elderly GP patients appears to need improvement.**

***Key words:*** **depression, recognition, treatment, elderly, family practice.**

**Harm van Marwijk, MD, Department of General Practice, Leiden University, PO Box 2088, 2301 CB Leiden, The Netherlands.**

Depression is an important health problem for older adults. It is a common condition which seriously affects a patient's quality of life and functional capacity (1). The point prevalence of major depression in community-dwelling elderly is about 3% (2), and 10% to 20% of older general practice patients have minor forms of depression (3).

The management of depression is mostly within a general practice setting (4). The quality of this management is the subject of debate. Usually it is supposed that general practitioners (GPs) do not recognize a sizable proportion of major depressions in the elderly (for example, see, the recent American consensus statement on depression) (5). However, few studies have actually examined this issue in a European primary care setting. In a British study, GPs' opinions on depression were compared with semi-structured assessments made by psychiatrists using explicit diagnostic criteria. Adequate recognition was observed, but treatment appeared to need improvement (6).

This report aims to describe GPs' management

(i.e, an element of recognition: knowledge, and treatment) of depression in the elderly and to discuss the issue of whether there is inadequate recognition and/or treatment. Case-vignettes were used to study GPs' recognition of depression in the elderly, and patient data were gathered to study treatment.

## Material and methods

*A. Recognition: the case-vignettes study*

Figure 1 shows the case-vignettes that were sent to a random sample of 100 GPs (92 male). To maximize the response the questionnaire was designed according to guidelines proposed by Erdos and Morgan, which include the sending of a number of reminders (7). The doctors were randomly selected out of 400 GPs associated with the Department of General Practice of Leiden University. One GP had died before the questionnaires were sent and one GP had stopped practising. Of the remaining 98, 68 GPs returned the postal questionnaire containing the two case-vignettes. Three GPs with incomplete questionnaires were considered as non-responding. An overall response rate of 66% was achieved after 3 response waves (65/98).

Table I presents characteristics of responders, non-responders and a national Dutch sample of GPs with respect to sex, age, years in practice, and type of practice (8).

To study the conceptual framework that GPs use to diagnose depression, the two case-vignettes were formulated to represent a major depression (9) according to criteria of the Diagnostic and Statistical Manual of Mental Disorders, third, revised version (DSM-III-R) (10). A major depression demands the presence of at least 5 symptoms among which depressed mood and loss of interest or pleasure are obligatory. Major depression was chosen because of clear cut treatment consequences (5).

In two open-ended questions, the GPs were then asked to name all the symptoms they considered suggestive of a depressive syndrome in the presented case-vignette, and to diagnose the case-vignettes.

To illustrate the measure of agreement between

*Figure 1.* The case-vignettes (8)

Case 1: a 68-year-old man comes to the surgery with his daughter. His wife passed away 10 years ago. According to the daughter, her father has been losing weight over the last month, and is no longer his old self. The patient looks pale, and has an air of tiredness and apathy. His weight is reduced by 5 kilograms because of poor appetite. The patient's sleep pattern is broken, and he is awake all night worrying. He blames himself for not being home enough when his wife was still alive, as he was always out working. He regrets that he is thus unable to enjoy his pension with her. When he thinks about this, he becomes emotional and sad. Death would be a solution.

Case 2: a 70-year-old man comes to the surgery. He visits the practice infrequently as his health has always been adequate. The reason for this visit is that he sleeps poorly after his wife's death two months ago. The patient looks destitute and tired. He is awake all night worrying, and is very sad. He misses his wife and rather wishes his own death. Loneliness is a heavy burden to him. Life has lost its meaning. On further questioning, he adds that because of his reduced appetite he has lost 3 kilograms.

*Table I.* Characteristics of respondents, non-respondents, and Dutch GPs (%).

| | Response (n=65) | Non-response (n=34) | Dutch GPs (n=6205) |
|---|---|---|---|
| Males | 89 | 97 | 90 |
| Age (years) x ± sd | 46.8 ± 8.9 | 52.8 ± 11.0 | 44 |
| 95% CI for mean | 44.4 – 49.2 | 49.0 – 56.6 | |
| Established for (years) x ± sd | 17.1 ± 8.8 | 22.2 ± 9.0 | 13 |
| 95% CI | 14.9 – 19.3 | 20.0 – 24.4 | |
| Single handed (%) | 60 | 77 | 53 |
| 95% CI | 48 – 72 | 60 – 94 | |

Non-responders differed significantly from responders in age and in mean duration of settlement (CI differences 1.3 – 9.3, and 2.6 – 6.8 years). Both groups had been settled as a GP for significantly longer than the entire population.

*Table II.* Differences and similarities between criteria for Depressive Disorder according to ICHPC-2-Defined, and for Major Depression and Dysthymic Disorder according to DSM-III-R.

| | ICHPPC-2-Defined | DSM-III-R | |
|---|---|---|---|
| | Depressive Disorder | Major Depression | Dysthymic Disorder |
| Structure: | | | |
| Minimum # of symptoms | ≥3 | ≥5 | ≥3 |
| Core symptoms | | | |
| – depressed mood | – | + | + |
| – decrease in interest | – | + | – |
| Content: | | | |
| – depressed mood | + | + | + |
| – suicidal thoughts or attempts | + | + | – |
| – decrease in interest | + | + | – |
| – indecisiveness | + | + | + |
| – worthlessness/sense of guilt | + | + | + |
| – insomnia/morning tiredness | + | + | + |
| – anxiety/irritability | + | – | – |
| – psychomotor agitation | + | + | – |
| – psychomotor retardation | – | + | – |
| – hypersomnia | - | + | + |
| – change in appetite/weight | – | + | + |
| – loss of energy | - | + | + |
| – concentration-problems | - | + | + |
| – loss of sexual drive | – | + | - |
| Duration/intensity: | | | |
| – duration (yrs.) | – | ≥2 wks. | ≥2 |
| – intensity (almost daily) | – | + | + |
| – social dysfunctioning | – | + | – |
| Exclusion criteria: | | | |
| – psychosis | + | – | – |
| – organic background | – | + | + |
| – uncomplicated bereavement | + | + | – |
| – brief depressive reaction (≥6 months) | + | – | – |

psychiatric and primary care definitions of depression, Table II presents differences and similarities between major depression and dysthymic disorder according to DSM-III-R, and depressive disorder according to the International Classification of Health Problems in Primary Care (ICHPPC-2-Defined). Depressive disorder requires the presence of at least 3 symptoms (11).

Both cases vary in the number of symptoms, and the recency of the presumed precipitant moment. Examples from other studies were used to model the case-vignettes (12). Their clinical validity was enhanced by presenting them first to medical and research staff of the Department of General Practice (n=15) and by including their comments in the final version of the case-vignettes.

At the end of the questionnaire, the GPs were asked whether they applied formal diagnostic criteria or a classification system. Then they were given the minimum duration criteria described in the DSM-III-R and were requested to specify their own minimum time criterion for a depressive syndrome in weeks.

### *B. Treatment: the study on patients considered depressed by GPs*

Seven GPs in the region of Leiden, including the first author, invited 461 consecutive consulting

patients from April to July 1990 to enter the study (3). A total of 77 patients were excluded: 16 patients for cognitive dysfunction or possible dementia; 16 patients for incomplete questionnaires; 26 patients who declined to take part; 19 patients for other reasons. This meant that 384 patients were available for analysis. The 77 non-participants and exclusions (17 male and 60 females, with a mean age of 77 years, SD=7.7, range 65-95) were on average 2 years older than the participants (p=0.014).

Data were available on 44 of 53 (out of 384) patients considered as mildly or seriously depressed at the time by the GPs (3). For 3 patients no permission was obtained for this part of the study and in 6 cases the GP did not complete the questionnaire. The 9 non-participants, 2 men and 7 women, did not differ significantly from the 44 other patients except for housing conditions ($p<0.05$): there were proportionally more non-responders (n=6) among patients who lived in homes for the elderly than among patients living on their own (n=3). The sample consisted of 5 males and 39 females, with a mean age of 74 years (range 65-85); 35 patients were living on their own, 9 in homes for the elderly; 20 patients were married or living with a partner, 24 were widowed, divorced or single. The GPs considered one of 44 patients as being psychotic at the time.

A routine hypertension (n=8) or diabetes check-up (n=6) was for 14 patients the main reason for the consultation. Only eight patients mentioned a psychosocial problem as one of the reasons for initiating their encounter with the GP at the time.

Three participating GPs were involved in undergraduate or postgraduate medical training. Six had at least five years of experience in general practice. The mean practice list size was 2600 patients (range 2200-3000), while the average list size in The Netherlands is 2400.

The doctors provided additional information about the reasons for the encounter of patients they considered as depressed, the length of the depressive episode, and which management decisions were made. These data were coded, using the International Classification for Primary Care (ICPC) (13).

To model treatment, the duration of the depressive episode was considered dichotomously: either less than 6 months or 6 months and longer. ICHPPC-2-Defined permits a 'brief depressive stress reaction' if symptoms last less than 6 months (Table II). On the basis of this criterion, the assumption was that active treatment was less likely to be initiated within six months. Treatment options were distinguished into five groups: supportive counselling, follow-up appointment, benzodiazepine prescription, antidepressant prescription, and referral to mental health care.

Fisher's exact test (2-tailed) was used to study the association between sex vs. response, and treatment vs. depressive symptoms and length of depressive episode. Confidence intervals (95%, CI) were calculated for differences between responders and non-responders on other variables. Data were analysed with SPSS-PC+, version 4.0.

# Results

*A. Recognition: case-vignettes*

Table III shows the number of doctors who recognized a depressive symptom. The mean number

*Table III.* Number of GPs who suggested a particular depressive symptom in two case-vignettes (n=65).

| | Case-vignette 1 | | Case-vignette 2 | |
|---|---|---|---|---|
| | n | % | n | % |
| 1. Depressed mood | 31 | 48 | 20 | 31 |
| 2. Decrease in interest | 44 | 68 | 6 | 9 |
| (*and* depressed mood) | 13 | 20 | 12 | 18 |
| 3. Suicidal thoughts or attempts | 50 | 77 | 42 | 65 |
| 4. Sleeping problems | 57 | 88 | 53 | 82 |
| 5. Change in appetite/weight | 58 | 89 | 54 | 83 |
| 6. Loss of energy | 26 | 40 | 27 | 42 |
| 7. Psychomotor retardation | 43 | 66 | 1* | 2* |
| 8. Worthlessness/ self-reproach/ inappropriate or excessive guilt | 30 | 46 | 9* | 14* |
| *Mean # of recognizing each symptom* | 42 (339/8) | | 34 (202/6) | |

* symptom not present in case-vignette

of depressive symptoms considered suggestive of a depressive syndrome in case-vignette one was 6.0 (SD 2.2, range 0-12).

The mean number of GPs who recognized each of 8 depressive symptoms in case one was 42 (339/8; 65%), while 51 GPs (78%) diagnosed a depressive syndrome. In case-vignette 2, the mean number of symptoms was 4.5 (SD 2.0, range 0-10). The mean number of GPs who recognized each of 6 depressive symptoms was 34 (202/6; 52%). In this case, 37 GPs (57%) diagnosed a depressive syndrome.

Only a minority of GPs employed formal diagnostic criteria in any way: 11 GPs used DSM-III-R criteria, 3 used Zung's Self-rating Depression Scale, and one GP utilized ICHPPC-2-Defined criteria. According to 22 of 65 GPs who had answered this question (34%) a depressive syndrome requires no minimum time-criterion. The other 43 GPs used a time-criterion of 5 weeks or shorter.

*B. Treatment: patients considered as depressed by GPs*

Table IV shows combinations of treatment consequences for the 44 patients, given the GPs assessment of depression.

Mostly the doctors provided supportive counselling (n=27, 61%). The GPs prescribed medication to 12 patients (benzodiazepines (n=3, 7%), and antidepressants (i.e., 1 considered severely and 8 mildly depressed by the GP, n=9, 20%). Antidepressants were prescribed to patients in low doses. The doctors specifically requested 18 patients to make follow-up appointments (41%). Three patients, one seriously depressed, were referred to mental health professionals (7%).

Table V presents two quantitative management indices: treatment by symptoms and by length of depressive episode. All patients (n=8) with three or more symptoms received treatment. Treatment was associated with symptoms ($p<0.02$) and length of depressive episode ($p<0.03$).

## Discussion

The two aims of this study were (a) to evaluate how many GPs recognize the symptoms and syndromes present in two major depression case-vignettes of elderly patients, and (b) to describe GPs' therapeutic policies with regard to this problem.

*A. Recognition: the case-vignettes*

The study with the case-vignettes showed that about 59% (mean, case 1 65%, case 2 52%) of single symptoms put in both major depression case-vignettes were identified adequately by the GPs. Two thirds of the GPs (mean, 78%, 57%) adequately considered a depressive syndrome in both case-vignettes. These results suggest that about one third of all GPs may need to improve their knowledge of major depression in the elderly.

The case-vignettes method surely has drawbacks. One limitation concerns the validity of the reference standard, the case-vignettes. In general, this method appears reliable and valid (14). However, it allowed us to study only one element of

*Table IV.* Combinations of management options (44 depressed patients; + = present; – = absent).

| Supportive counselling | Follow-up appointment | Benzodiazepine | Antidepressant | Referral | n | % |
|---|---|---|---|---|---|---|
| – | – | – | – | – | 17 | 38.6 |
| + | – | – | – | – | 6 | 13.6 |
| + | + | – | – | – | 8 | 18.2 |
| + | + | – | + | – | 7 | 15.9 |
| + | + | + | – | – | 3 | 6.8 |
| + | – | – | + | + | 2 | 4.5 |
| + | – | – | – | + | 1 | 2.3 |
| Total | | | | | 44 | 100.0 |

*Table V.* Quantitative management indices: treatment, by number of symptoms and lenght of depressive episode (44 depressed patients).

Symptoms (+: ≥ 3)

| Treatment | - | + | Row Total |
|---|---|---|---|
| - | 17<br>47% | 0<br>0% | 17<br>39% |
| + | 19<br>53% | 8<br>100% | 27<br>61% |
| Column Total | 36<br>82% | 8<br>18% | 44<br>100% |

Length (+: ≥ 6 months)

| Treatment | - | + | Row Total |
|---|---|---|---|
| - | 5<br>83% | 12<br>31% | 17<br>39% |
| + | 1<br>17% | 26<br>68% | 27<br>61% |
| Column Total | 6<br>14% | 38<br>86% | 44<br>100% |

recognition: the GPs' knowledge of depression (e.g., interview skills were not considered) (15). Thus no conclusions can be drawn with regard to actual performance in practice. One advantage of this method is that it excludes variations in management that may be attributable to patients, with their own particular mode of presentation or preferences. This may be even more true for elderly patients who have a tendency to underreport depression (5).

As usual we were plagued by the problem of non-response. Only 65 doctors returned a complete questionnaire, although for mail surveys this response rate (66%) is adequate (7). The responders were nonetheless representative for the entire population of Dutch GPs. The non-responders were older and had more experience in practice.

Although most GPs (43) made use of a time criterion of 5 weeks or less for a depressive syndrome, ICHPPC-2-Defined sets no minimum time for a depressive disorder. Compared with the more precise time-rule described in DSMIII-R, the lack of a specific time-criterion for mild depressive disorder may be considered a weakness of ICHPPC-2-Defined. The new provisional revision of the International Classification of Diseases (ICD-10), which will be compatible with ICHPPC, allows for a 'depressive episode of mild severity' by requiring a minimum duration of 2 weeks (16).

### *B. Treatment: the patients considered depressed by GPs*

Overall rates of prescription of antidepressant drugs and referral were low. A total of 17 of the 44 patients (39%) received no management while they were considered depressed by the GP, but all depressives with three or more symptoms did receive treatment. Of all patients with a depressive episode of six months or more, 12 (31%) received no treatment. The association (RR: 10.8) between length of depressive episode and treatment had a wide confidence interval (1.1 – 103.8), indicating that the association was not dependable. These findings suggest that patients were treated in a consistent way.

The observed data on treatment appear to confirm the very limited findings from detailed studies in primary care (i.e., treatment may need some improvement) (6). However, it is somewhat difficult to interpret these data. A German study in primary care outpatients with functional complaints shows that the majority of depressed patients in general practice fall into the group of Depression Not Otherwise Specified (DSM-III-R) or Depressive Disorder (17). What constitutes adequate treatment for this condition is not clear, although a proportion of these patients may benefit from conventional antidepressant treatment. Second, only 8 of the 44 patients considered depressed by the GPs mentioned a psychosocial problem as a reason for the encounter. Perhaps patients did not agree with the diagnosis of depression, and therefore with treatment.

## Conclusions

Keeping the limitations of our study in mind, the results suggest inadequate knowledge among some GPs and some inconsistency of treatment of depression in elderly GP patients. Further study is needed.

## References


1. Wells KB, Stewart A, Hays RD, Burnam A, Rogers W, Daniels M et al. The functioning and well-being of depressed patients. J Am Med Assoc 1989;262:914–9.
2. Bland RC, Newman SC, Orn H. Prevalence of psychiatric disorders in the elderly in Edmonton. Acta Psychiatr Scand 1988;77:57-63.
3. van Marwijk H, Hoeksema HL, Hermans J, Kaptein AA, Mulder JD. Prevalence of depressive symptoms and depressive disorder in elderly general practice patients. Fam Pract 1994; accepted for publication.
4. Royal College of General Practitioners, Office of Population Censuses and Surveys, Department of Health. Morbidity statistics from general practice. Third National study. A publication of the Government Statistical Service. Series MB5 No. 1 London, NIMHHSMO, 1986.
5. Consensus development panel on depression in late life. Diagnosis and treatment of depression in late life. J Am Med Assoc 1991;268:1018-24.
6. Macdonald AJD. Do general practitioners "miss" depression in elderly patients? BMJ 1986;292: 365–8.
7. Erdos PL, Morgan AJ. Professsional mail surveys. Malabar/Florida: Robert E. Krieger Publishing Company Inc., 1983.
8. Bensing JM, Foets M, van der Velden J. The national study of illnesses and interventions in general practice. Background and methods. Huisarts Wet 1991;34:51-61.
9. Blazer DG. Depression in late life. St. Louis: The C.V. Mosby Company, 1982.
10. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. Third Edn., revised. Washington, DC, American Psychiatric Association, 1987.
11. Classification committee of WONCA. ICHPPC-2-Defined. Inclusion criteria for the use of the rubrics of the International classification of health problems in primary care. Oxford: Oxford University Press, 1983.
12. Dale J, Middleton H. Factors influencing general practitioners' management of psychosocial and physical problems: a study using case-vignettes. Br J Gen Pract 1990;40:284-8.
13. Lamberts H, Wood M, (eds.) ICPC. International Classification of Primary Care. Oxford, Oxford University Press, 1987.
14. Kuyvenhoven MM, Jacobs HM, Touw-Otten FWMM, van Es JC. Written simulation of patient-doctor encounters. 3. Fam Pract 1984;1:25-9.
15. Shulberg HC, McClelland M. A conceptual model for educating primary care providers in the diagnosis and treatment of depression. Gen Hosp Psychiatry 1987;9:1-10.
16. International Classification of Disease (ICD-10). Diagnostic Criteria for Research. May 1990 Draft. F30-F39 Mood (affective) disorders. P 66.
17. Winter P, Phillip M, Buller R, Delmo CD, Schwarze H, Benkert O. Identification of minor affective disorders and implications for psychopharmacology. J Aff Disorders 1991; 125-33.


Received September 1993
Accepted January 1994